

Remarks

Reconsideration of the rejections set forth in the Final Office Action dated December 9, 2005 is respectfully requested. Claims 1-6 are currently pending and have been rejected.

Claims 1-6 have been amended for clarity. Claim 1 has additionally been amended to recite a limitation that was originally presented in dependent claim 2. It is respectfully submitted that no new matter has been added with the amendments to the claims.

It is noted that claims 5 and 6 have been rejected as being indefinite, but have not been rejected in view of cited references. The Applicants respectfully request that the Examiner provide clarification on whether she believes claims 5 and 6 contain allowable subject matter.

Claim Objections

The Examiner has objected to the claims because they included reference characters which were not enclosed within parentheses. Where appropriate, the Applicants have amended the claims to include reference numbers enclosed in parentheses. Accordingly, the Examiner's objection to the claims as including reference characters which were not enclosed within parentheses is believed to be overcome.

Claim 3 was objected to for an informality. In view of the Examiner's objection, the Applicants have amended claim 3. As such, the objection to claim 3 for including an informality is believed to be overcome.

Claims 5 and 6 were objected to as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. Claims 5 and 6 have been amended to be written in proper form. Therefore, the Examiner's objections to claims 5 and 6 are believed to be overcome.

Rejections under 35 USC § 112

Claims 1-6 have been rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Claims 1-6 have further been rejected as failing to define the invention in the manner required by 35 USC § 112, second paragraph, and also as being indefinite in that they fail to point out what is included or excluded by the claim language.

In a sincere effort to overcome the rejections of claims 1-6 under 35 USC § 112, second paragraph, claims 1-6 have been amended. It is respectfully submitted that the amendments to the claims do not introduce new matter, and simply more clearly recite that which was recited in the claims as originally filed.

Rejections under 35 USC § 103

The Applicants would like to confirm that the subject matter of the various claims was commonly owned at the time the instant application was filed.

Claims 1-4 have been rejected under 35 USC § 103(a) as being unpatentable over Bacon et al., U.S. Patent Publication No. 2004/0192338 (hereinafter “Bacon”) in view of Prince et al., U.S. Patent Publication No. 2002/0151329 (hereinafter “Prince”).

1. Claim 1 and its dependents

With all due respect to the Examiner, the Applicants submit that perhaps the Examiner has misconstrued the limitation in claim 1 regarding connectivity to a mobile phone. By way of explanation, the Applicants note that there are typically two output ports of a mobile phone, namely a headset port and a serial data port. A mobile phone provides, through these output ports, the capability to connect a second device to the mobile phone such that RF voice and/or

data signals originating from a mobile base station, for example, may effectively be routed to a connected second device via the mobile phone. Devices designed to connect to a mobile phone, e.g., for RF signal routing, may be adapted to be interfaced with an output port of the mobile phone.

The Applicants respectfully disagree with the Examiner's rejection of claim 1, and submit that Bacon in view of Prince does not teach of or reasonably suggest the claimed invention.

The Examiner admits on page 5 of the Final Office Action dated December 9, 2005 that Bacon fails to disclose connecting a mobile phone headphone output port to receive ringer and voice AC signals from a mobile phone. However, the Examiner has argued that Prince overcomes this deficiency of Bacon. On page 5 of the Office Action dated December 9, 2005, the Examiner makes the following statement:

“Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to connect the apparatus of Bacon to a mobile phone headphone output port to receive ringer and voice AC signals from the connected mobile phone as input as suggested by Prince.”

The Applicants disagree with the Examiner's argument, and respectfully submit that a combination of Bacon and Prince fails to teach the limitation of connecting a mobile phone headphone output port such that ringer and voice AC signals are received from a mobile phone by an apparatus that includes a headphone output port.

Bacon appears to teach that a converter converts signals from a coupling 208 (Bacon, paragraph [0029]), and that the coupling 208 is connected to an auxiliary port of a phone 204 (Bacon, paragraph [0026]). Bacon describes that converter 216 interfaces an ordinary telephone to a wireless phone 204 (Bacon, paragraph [0029]), and describes components of converter 216. These components are arranged to convert signals received from coupling via an auxiliary port of phone 204, which is not shown or described as being a headset port.

Prince discloses plugging a plug into a headset socket to adapt the handset for hands-free headset use (Prince, paragraphs [0015] and [0016]). Neither Prince nor Bacon disclose any circuitry that is arranged to be used with a headset socket. It is respectfully submitted that combining Prince and Bacon effectively does nothing with the input signal received through a headset socket, as Bacon does not disclose or suggest doing anything with signals received on a headset port, and there is no indication that the signals received via a headset port of a mobile phone of Bacon would reach an auxiliary port of the mobile port and, hence, a converter.

The Examiner argues that one of ordinary skill in the art would have been motivated to combine Bacon and Prince, because no physical modification to a telephone unit would be required to receive ringer and voice AC signals as input. With all due respect to the Examiner, the passage at paragraph [0005] of Prince states that no physical modification is required because electrical connection to a wireless telephone is made via its “hands-free” circuitry. However, it is noted that the circuitry of Bacon would have to be modified to be used with Prince, as the circuitry of Bacon is configured to function with an auxiliary port of a mobile phone that is not a headset port. Hence, Bacon and Prince do not suggest, either alone or in combination, the limitations of claim 1. Accordingly, it is respectfully submitted that claim 1 is allowable over the cited arts for at least the reasons set forth.

Claim 1, as amended, recites a ring tone circuit controller arranged to detect a ringer voltage from a mobile phone to generate an approximately 12 V AC current arranged to trigger the ringer of a land-line communications apparatus, and to detect the lifting of a handset from a hook of the land-line communications apparatus. On page 6 of the Office Action dated December 9, 2005, that Bacon in view of Prince discloses this limitation. However, the Examiner does not appear to have indicated which passages of Bacon and Prince are believed to suggest this limitation. It is respectfully submitted that element 212 of FIG. 2 of Bacon appears to be a ring tone generator, and Bacon discloses in paragraph [0028] that “ring tone generator 212 may be included to provide ring tone voltage through the RJ-11 jack 104 to the ordinary telephone 106....” Bacon does not disclose, however that this ring tone voltage is approximately 12 V AC. Further, Bacon also does not appear to disclose that the ring tone generator is arranged to detect the lifting of a handset from a hook of the ordinary telephone. Prince does not appear to

overcome this deficiency of Bacon. Neither Bacon nor Prince, either alone or in combination, appears to teach the ring tone circuit controller of claim 1. Accordingly, claim 1 is also believed to be allowable over the cited art for at least this reason as well.

Claim 1 also recites a voltage drivers circuit arranged to split an approximately 11 V DC current into an approximately 8 V DC current and an approximately 11 V DC current. The Examiner has argued that FIG. 7 of Bacon somehow discloses splitting AC power into an 8 V DC power output and an 11 V DC power output. While Bacon discusses transforming or converting input voltages into an operating voltage (Bacon, paragraph [0048]), there appears to be no teaching or remote suggestion of FIG. 7 including a voltage drivers circuit, particularly a voltage drivers circuit that is arranged to split an approximately 11 V DC current into an approximately 8V DC current and an approximately 11 V DC current. Prince does not appear to overcome this deficiency of Bacon. Hence, claim 1 is further believed to be allowable over the cited art for at least this additional reason.

Claims 2-4 each depend either directly or indirectly from claim 1 and are, therefore, each believed to be allowable over the cited art for at least the reasons set forth above with respect to claim 1. Each of these dependent claims recites additional limitations which, when considered in light of claim 1, are believed to further distinguish the claimed invention over the art of record. By way of example, regarding claim 2, the Examiner acknowledges on page 7 of the Office Action dated December 9, 2005 that “Bacon fails to disclose which connects to a mobile phone headphone output for a 3V AC signal input,” but argues that “Prince discloses which connects to a mobile phone headphone output for a 3V AC signal input (page 1, paragraph [0015]).” Paragraph [0015] of Prince reads as follows:

“... Plug 30-B is inserted into the standard hands-free headset socket 35. A three-conductor triaxial 2.5 mm socket is standard in many wireless telephone....”

Though Prince teaches of inserting a plug into a headset socket, the plug is disclosed as being associated with a headset (Prince, paragraph [0005]). The headset allows hands-free use of a wireless telephone. There is no teaching or suggestion that the headset socket of prince is used

to obtain any voltage, let alone an approximately 3 V AC signal. Therefore, claim 2 is believed to be allowable over the cited art for at least this additional reason as well.

Claim 3 recites specific circuit elements which, by the Examiner's own admission on pages 7 and 8 of the Office Action dated December 9, 2005, Bacon fails to disclose. However, the Examiner argues that it would have been an obvious matter of design choice to incorporate this circuitry design since the Applicants have not disclosed that their design solves any stated problem or is for any particular purpose. On the contrary, on page 2 of the Specification, the Applicants state that a Personal Mobile Companion provides a low cost means to enable use of a house land-line telephone through a mobile telephone, and that the Personal Mobile Companion is compatible with all network standards and mobile handsets using different frequency bands. Further, claim 3 relates to utilizing ringer and voice AC signals from a headset port, while the circuitry of Bacon does not. With all due respect to the Examiner, it is respectfully submitted that if the use of high pass filter circuitry in the system of Bacon in combination of Prince were so obvious, at least one of Bacon or Prince would have taught the use of high pass filter circuitry. As such, claim 3 is believed to be allowable over the cited art for at least these additional reasons as well.

2. *Distinguishing apparatus claims*

The Examiner has made the following statement on page 7 of the Office Action dated December 9, 2005:

“It should be emphasized that ‘apparatus claims must be structurally distinguishable from the prior art.’ MPEP 2114. *In re Danly*, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of structure rather than function. In *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, . . . , the court held that: ‘Apparatus claims cover what a device is, not what it does.’”

It is respectfully submitted that the apparatus claims of the instant application are each distinguished from the prior art in terms of structure. By way of example, claim 2 recites that a

ring tone circuit controller includes a ring tone generator that is interfaced with a headset port of a mobile phone. Bacon does not teach of this limitation, and a combination of Bacon and Prince, at best, would appear to suggest that a mobile phone has a headset plugged into a headset socket while an auxiliary port of the mobile phone is coupled to a ring tone generator.

Additionally, claim 3 recites that circuitry includes a high pass filter circuit with at least one resistor, at least one induction coil, and at least one capacitor. The circuitry also includes a capacitor arrangement and a diode arrangement. By the Examiner's own admission on pages 7 and 8 of the Office Action dated December 9, 2005, Bacon fails to teach of these features. Hence, claim 3 is believed to be structurally different from the prior art.

3. *Additional Arguments*

The Applicants would like to address what they perceive to be specific differences between the submitted invention and the two cited prior arts.

1. The present invention is believed to be structurally distinguishable over Prince because
 - a. Prince describes embodiments designed to provide "data access to the Internet and other networks, and to providing facsimile communications, ..." (Prince: page 1, paragraph [0002]).
 - b. The preferred embodiment of Prince appears to be a coupler designed for connecting wireless telephone to any portable or fixed data device such as a computer (Prince: page 1, paragraph [0004], lines 1-4).
 - c. The preferred embodiments of Prince appear to utilize RF shielding and/or filtering, e.g., units 210 and 250 as shown in FIG. 3, to protect against interference from external RF transmissions, RF emissions and RF conductance (Prince: page 1, paragraph [0007]; Fig. 3).
2. The present invention is believed to be structurally different from Bacon in preferred embodiment design because:

- a. The prior art by Bacon et al. claims an embodiments that utilizes a geonavigational device for “ ... detecting whether an attempt to use the wireless device is occurring at a first location by analyzing switch records to determine base station information ...” (Bacon: page 5, claim 1, line 5 – 7).
- b. The preferred embodiments of the fixed wireless device 102 of the prior art by Bacon et al. includes an additional antenna 110 to increase the range and/or quality of the wireless connection. (Bacon: page 2, paragraph [0023]).
- c. The preferred embodiments of the prior art by Bacon et al. requires an additional apparatus, such as “a converter 718 to convert the audio transmission portion of the duplexed two-wire POTS signal to the audio transmission portion of the four-wire cellular phone signal.” (Bacon: page 4, paragraph [0047]).
- d. The preferred embodiments of the prior art by Bacon et al. requires additional apparatus, such as a DTMF receiver 704, a call progress encoder 706, and a control processor 702 in order to function properly for handling analog tone signal. (Bacon: page 4, paragraph [0044] and [0045]; Fig. 7).
- e. The preferred embodiments of the prior art by Bacon et al. requires additional apparatus 720, a zero crossing detector, and 702, a control processor, to determine the operability of the fixed wireless device 102. (Bacon: page 5, .. paragraph [0049]; Fig. 7).

Conclusion

For at least the foregoing reasons, the Applicants believe all claims now pending in this application are in condition for allowance and should be passed to issue. If the Examiner believes a telephone conference would in any way expedite prosecution of the application, please do not hesitate to contact the undersigned at 480-385-9942.

Respectfully submitted,



Kun Ho Lie